

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the subject application, and please amend the claims as follows:

1. (Currently amended) An implantable prosthesis having improved mechanical and chemical properties comprising:

a radiation resistant and hydrolytically stable biocompatible fabric having inner and outer surfaces and first and second ends;

said fabric having a woven textile construction comprising a plurality of radial filaments and a plurality of longitudinal filaments, said longitudinal filaments being disposed longitudinally along the length of said prosthesis and said radial filaments being disposed generally perpendicularly to said longitudinal filaments, said longitudinal filaments and said radial filaments of a plurality of polymeric filaments comprising at least two naphthalene dicarboxylate derivatives, wherein said radiation resistant and hydrolytically stable biocompatible fabric is stable at a temperature of at least about 120°C,

and wherein said ~~plurality of polymeric~~ radial filaments comprises a combination of undrawn and partially drawn radial filaments.

2. (Original) The implantable prosthesis of claim 1 wherein said fabric is polyethylene naphthalate.

3. (Original) The implantable prosthesis of claim 1 wherein said fabric is selected from the group consisting of poly(ethylene naphthalate), poly(propylene naphthalate), poly(trimethylene naphthalate), trimethylenediol naphthalate, poly(iso-propylene naphthalate), poly(n-butylene naphthalate), poly(iso-butylene naphthalate), poly(tert-butylene naphthalate), poly(n-pentylene naphthalate), poly(n-hexylene naphthalate), and combinations and derivatives thereof

4. (Cancelled)

5. (Original) The implantable prosthesis according to claim 1 wherein said implantable prosthesis is a vascular graft.

6. (Original) The implantable prosthesis according to claim 1 wherein said implantable prosthesis is an endovascular graft.

7. (Withdrawn) The implantable prosthesis according to claim 1 wherein said implantable prosthesis is selected from the group consisting of a balloon catheter, filter, mesh, vascular patch, hernia plug and arterial-vascular access graft.

8. (Original) The implantable prosthesis according to claim 1 further including a coating.

9. (Original) The implantable prosthesis according to claim 1, wherein the polymeric filaments have about 20 to about 100 filaments.

10. (Original) The implantable prosthesis according to claim 1, wherein the polymeric filaments have a denier from about 20 to about 1500.

11. (Previously presented) An implantable prosthesis having improved mechanical and chemical properties comprising:

a radiation resistant and hydrolytically stable biocompatible tubular fabric of a textile construction,

said fabric having a plurality of yarns comprising polyethylene naphthalate and polybutylene naphthalate, wherein said radiation resistant and hydrolytically stable biocompatible fabric is stable at a temperature of at least about 120°C,

and wherein said plurality of polymeric filaments comprises a combination of undrawn and partially drawn radial filaments.

12. (Original) The implantable prosthesis according to claim 11 wherein said implantable prosthesis is a intraluminal prosthesis.

13. (Original) The implantable prosthesis according to claim 11 wherein said implantable prosthesis is an endovascular graft.

14. (Original) The implantable prosthesis according to claim 11 further including a radially deformable support component.

15. (Original) The implantable prosthesis according to claim 14 wherein said support component is a radially deformable stent.

16. (Cancelled)

17. (Currently amended) Method for making a radiation and thermal resistant and hydrolytically stable, steam sterilizable biocompatible prosthesis comprising:

a) partially drawing a plurality of polymeric filaments comprising at least two naphthalene dicarboxylate derivatives;

b) forming a fabric having an inner and outer surface and first and second ends, said fabric having a woven textile construction comprising a plurality of radial filaments and a plurality of longitudinal filaments, said longitudinal filaments being disposed longitudinally along the length of said prosthesis and said radial filaments being disposed generally perpendicularly to said longitudinal filaments, said radial filaments of a plurality of radial polymeric filaments comprising a combination of said partially drawn polymeric filaments

and undrawn polymeric filaments, wherein said fabric being stable at a temperature of at least about 120°C; and

c) forming said prosthesis from said fabric.

18. (Cancelled)

19. (Previously presented) The implantable prosthesis according to claim 1, wherein said partially drawn and undrawn polymeric filaments are capable of circumferential expansion.

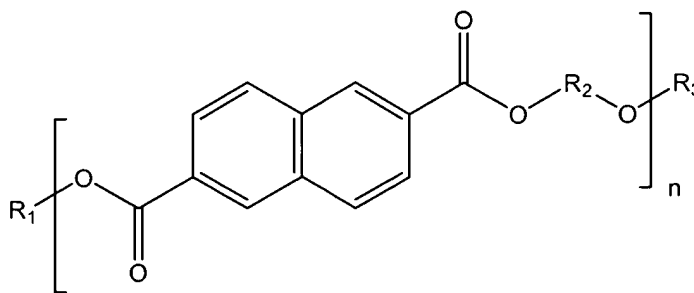
20. (Cancelled)

21. (Currently amended) An implantable prosthesis having improved mechanical and chemical properties comprising:

a radiation resistant and hydrolytically stable biocompatible fabric having inner and outer surfaces and first and second ends;

said fabric having a textile construction of a plurality of polymeric filaments which comprises a combination of undrawn and partially drawn radial filaments comprising at least two naphthalene dicarboxylate derivatives, wherein said radiation resistant and hydrolytically stable biocompatible fabric is stable at a temperature of at least about 120°C,

wherein said naphthalene dicarboxylate derivatives conforms to the formula:



wherein R₁ and R₃ are the same or different groups and are independently selected from the group consisting of hydrogen radicals and methyl radicals; R₂ is an alkylene radical having 1

to 6 carbon atoms which may be linear or branched; and n is from about 10 to about 200, and wherein said prosthesis further comprises a series of crimps.

22. (Cancelled)

23. (Previously presented) An implantable prosthesis having improved mechanical and chemical properties comprising:

a radiation resistant and hydrolytically stable biocompatible tubular fabric of a textile construction,

said fabric having a plurality of yarns comprising polyethylene naphthalate and polybutylene naphthalate wherein said radiation resistant and hydrolytically stable biocompatible fabric is stable at a temperature of at least about 120°C.

24. (Currently amended) An implantable prosthesis having improved mechanical and chemical properties comprising:

a radiation resistant and hydrolytically stable biocompatible fabric having inner and outer surfaces and first and second ends;

said fabric having a woven textile construction comprising a plurality of radial filaments and a plurality of longitudinal filaments, said longitudinal filaments being disposed longitudinally along the length of said prosthesis and said radial filaments being disposed generally perpendicularly to said longitudinal filaments, said longitudinal filaments and said radial filaments ~~of a plurality of polymeric filaments~~ comprising a naphthalene dicarboxylate derivative, wherein said radiation resistant and hydrolytically stable biocompatible fabric is stable at a temperature of at least about 120°C,

and wherein said ~~plurality of polymeric~~ radial filaments comprises a combination of undrawn and partially drawn radial filaments.